

204210-29



FIG. 1

10053662.012402
204210.2995007

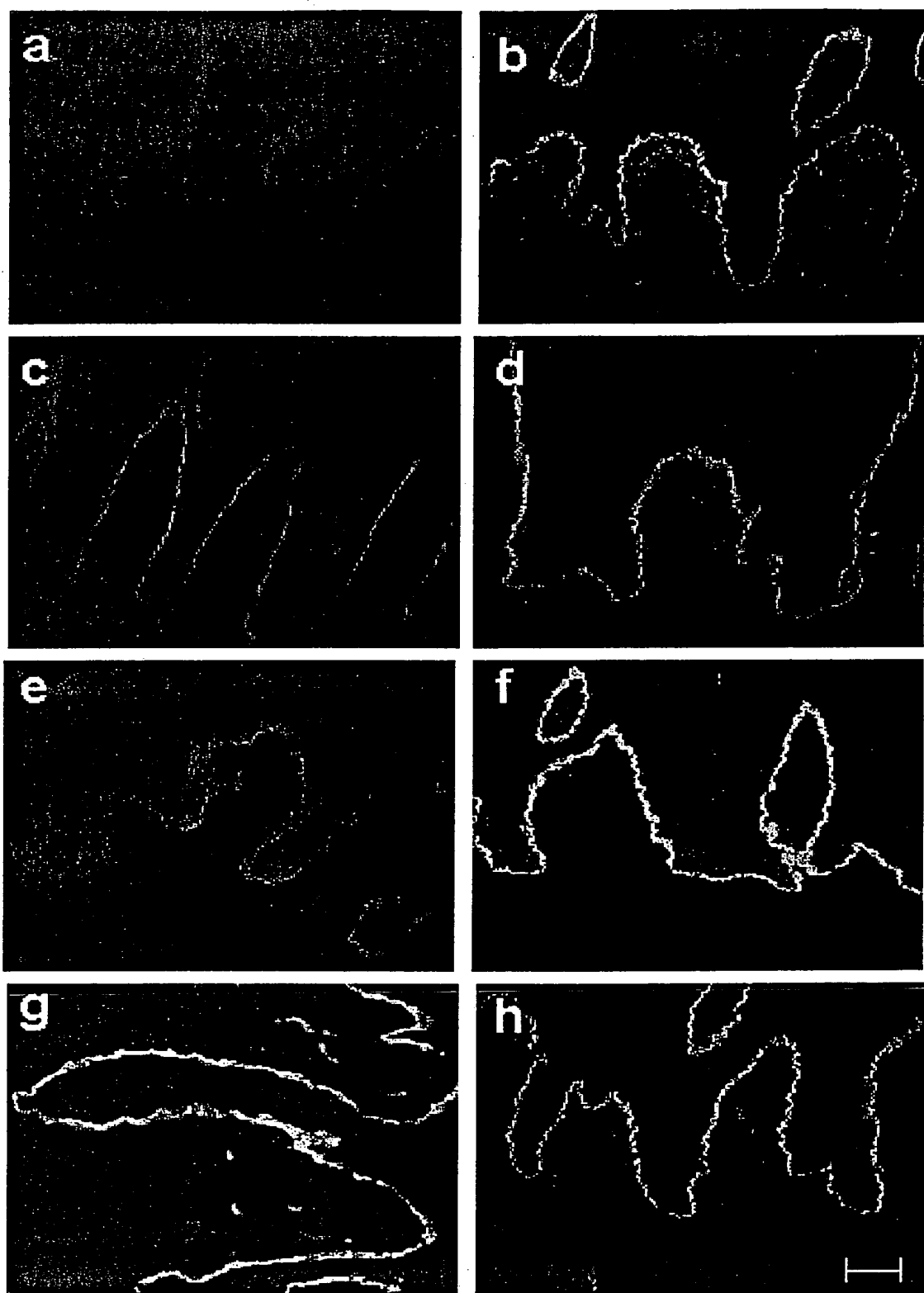


FIG. 2

5' TGGGTCCTCCTTATTACAGG -177

TGAGTCACACCCTGAAACACAGGCTCTCTTCTGTGTCAGGACTGAGTCAGGTAGAAAGAGTCGATAAAACCACCTGATCAAGGAAAAG -91
 GAAGGCACAGCGGAGCGCAGAGTGAGAACTCCAGCGGCGAGGCGCCGGGCGAGCGACCCCTGCAGCGGCGGACCGCGCGCCGCGCTGGCC -1
 ATGCCTGCGCTCTGGCTGAGCTGTACCTCTGCTTCTCGCTCCTCTGCCCCGAGCCCGGGCCACCTCCGGGAGGGAAGTCTGTGATTGC 90
 M P A L W L S C Y L C F S L L L P A A ^R A T S G R | E V C D C 30
Dom V
 AACGGGAAGTCCAGGCAATGCATCTTTGACCAGGAAGTTCACAAACAGACAGGAAATGGATTCCGCTGCCTCAACTGCAATGACAACACT 180
 N G K S R Q C I F D Q E L H K Q T G N G F R C L N C N D N T 60
 GATGGCATCCACTGCGAGAGGTGCAAGGCAGGATTTTACCGACAGAGAGAAAGGACCGTGTTTACCCTGCAATTGTAACCTCTAAAGGT 270
 D G I H C E R C K A G F Y R Q R E R D R C L P C N C N S K G 90
 TCTCTTAGCGCTCGATGTGACAACTCTGGACGGTGCAGCTGTAAGCCAGGTGTGACAGGAGACAGGTGTGACCGATGTCTGCCCCGGCTTC 360
 S L S A R C D N S G R C S C K P G V T G D R C D R C L P G F 120
 CACACACTCACTGATGCTGGGTGCGCCCAAGACAAAGGCTGCTAGACTCCAAGTGTGACTGTGACCCAGCTGGCATCTCAGGGCCCTGT 450
 H T L T D A G C A Q D Q R L L D S K C D C D P A G I S G P C 150
 GACTCAGGCGGCTGTGTCTGCAAGCCGGCTGTCACTGGAGAGCGCTGTGATAGGTGTGACCCAGGTACTATCACCTGGATGGGGGAAAC 540
 D S G R C V C K P A V T G E R C D R C R P G Y Y H L D G G N 180
 CCTCAGGGCTGTACCCAGTGTCTTTGCTATGGGCATTCCGCCAGCTGCCACAGCTCTGGGGACTACAGTGTCCATAAAATCATCTCTGCC 630
 P Q G C T Q C F C Y G H S A | S C H S S G D Y S V H K I I S A 210
dom. IV
 TTCCTCAAGATGTGATGGCTGGAAGGCTGTCCAAAGAAACGGGTCTCTGCAAAGCTCCAGTGGTCACAGCGCCATCGGGATATATTT 720
 F Q D V D G W K A V Q R N G S P A K L Q W S Q R H R D I F 240
 AGCTCAGCACGACGATCAGACCCTGTCTATTTGTAGCTCCTGCCAAATTTCTTGGAATCAACAGGTGAGCTACGGGCAAAGCCTATCT 810
 S S A R R S D P V Y F V A P A K F L G N Q Q V S Y G Q S L S 270
 TTGCACTACCGTGTGGATAGGGGAGGACAGACCCCATCTGCCCATGACGTGATCCTGGAAGGTGCTGGTCTACGGATCACAGCTCCCTTG 900
 F D Y R V D R G G R H P S A H D V I L E G A G L R I T A P L 300
 ATGCACCTTAGCAAGACACTGCCTTGTGGGATCACCAAGACTTACACATTAGATTAAATGAACATCCAAGCAGTAATTGGAGCCCCCAG 990
 M D L S K T L P C G I T K T Y T F R L N E H P S S N W S P Q 330
 CTAAGTTACTTTGAGTATCGAGGTTACTGCGGAACCTCACAGCCCTGCGGATCCGAGTACCTACGGAGAATACAGTACTGGGTACATT 1080
 L S Y F E Y R R L L R N L T A L R I R A T Y G E Y S T G Y I 360
 GACACGTCGACCTTGATTTTCAGCCCGCCCCGTTTCTGGAGCCCCAGCGCCCTGGGTGGAACAATGTGTATGCCCTGTTGGCTACAAGGGG 1170
 D N V T L I S A R P V S G A P A P W V E Q C V C P V G Y K G 390
Dom. III
 CAGTTCTGCCAGGATTGTGCTTCCGGCTACAAAAGAGATTACGCCAGACTGGGACCTTTTGGCACCTGTATTCCATGTAAGTCCAAGGG 1260
 Q F C Q D C A S G Y K R D S A R L G P F G T C I P C N C Q G 420
 GGAGGGGCTGCGATCCAGACACAGGAGACTGTTACTCAGGGGATGAGAACCCTGACATCCCTGAGTGTGCTGACTGCCCCATTGGTTTC 1350
 G G A C D P D T G D C Y S G D E N P D I P E C A D C P I G F 450
 TACAACGATCCACAAGACCCCGCAGCTGCAAGCCGTGCCCCGTGTCGCAATGGTTTCAGCTGCTCCGTGATGCCTGAGACAGAGGAGGTG 1440
 Y N D P Q D P R S C K P C P C R N G F S C S V M P E T E E V 480
 GTGTGCAATAACTGCCCCAGGGTGTCACTGGTGCCCGCTGTGAGCTCTGTGCTGATGGCTATTTTGGGGACCCCTTCGGGGAACTGGC 1530
 V C N N C P Q G V T G A R C E L C A D G Y F G D P F G E R G 510
 CCAGTGAGGCCTTGTGAGCCTGTGAGTGAACAACAACGTGGACCCTAGTGCTCCGGGAACGTGTGACCGCCTGACAGGCAGGTGTCTG 1620
 P V R P C Q P C Q C N N N V D P S A S G N C D R L T G R C L 540
 AAGTGCATCCACAACACAGCTGGGGTCCACTGTGACCAAGTGAAGCAGGCTACTATGGGGACCCGTGGCTCCCAATCCAGCAGACAAG 1710
 K C I H N T A G V H C D Q C K A G Y Y G D P L A P N P A D K 570
 TGTCGAGCTTGCAACTGCAACCCAGTGGGCTCGGAGCCTGTGGAGTGTGCAAGTGTGAGTGTGTTTGAAGCCAGGCTTTGGTGGC 1800
 C R A C N C N P V G S E P V E C R S D G S C V C K P G F G G 600

FIG. 3

CTCAGCTGTGAGCATGCGGCACTGACCAGCTGTCCAGCTTGCTATAATCAAGTGAAGGTTTCAGATGGATCAGTTTATGCAGCAGCTCCAG 1890
L S C E H A A L T S C P A C Y N Q V K V Q M D Q F M Q Q L Q 630
└─┬─┘ Dom. I/II
ATCCTGGAGGCCCTGATTTTGAAGGCTCAGGGTGGAGCAGTACCCAACGCAGAGCTGGAAGGCAGGATGCAGCAGGCTGAGCAGGCCCTT 1980
I L E A L I S K A Q G G A V P N A E L E G R M Q Q A E Q A L 660
CGGGACATTCTGAGAGAAGCCAGATTTACAAGATGCTGTTAGATCCTTCAATCTCCGGGTGGCCAAGGCAAGGACTCAAGAGAATAGC 2070
R D I L R E A Q I S Q D A V R S F N L R V A K A R T Q E N S 690
TACCGGGACCGCCTGGATGACCTCAAGATGACTGTGGAAAGAGTTCGGGGCCCTGGGCAGTCAGTATCAGAACCAAGTTCAGGATACTCGC 2160
Y R D R L D D L K M T V E R V R A L G S Q Y Q N Q V Q D T R 730
AGGCTCATCACTCAGATGCGCCTGAGCCTGGAGGAAAGTGAGGCTTCCCTGCAAAACACCAACATTCTCTCCTTCAGAGCACTACGTGGGG 2250
R L I T Q M R L S L E E S E A S L Q N T N I P P S E H Y V G 750
CCAAATGGCTTTAAAAGTCTGGCTCAGGAGGCCACGAGATTGGCAGACAGCCATGTTTCAGTCAGCCAGTAACATGGAGCAACTGGCAAAG 2340
P N G F K S L A Q E A T R L A D S H V Q S A S N M E Q L A K 780
GAAACCCAGGAGTATTCAAAGAGCTGATGTCACTGGTGC CGGAGGCTCTGCAGGAAGGAGGCGGAAGCGGCAGCCTGGACGGAGCCGTG 2430
E T Q E Y S K E L M S L V R E A L Q E G G G S G S L D G A V 810
GTGCAAAGGCTTGTGGGAAAATTGCAAAAACTAAATCTCTGGCCAGGAGTTGTGCGAGGGAGGCCACGCAAACCGACATGGAAGCAGAT 2520
V Q R L V G K L Q K T K S L A Q E L S R E A T Q T D M E A D 840
AGGCTTATCAGCATAGTCTCCACCTTCTCAATTCCGTGTCTCAGATTTCAGGGAGTCAATGATCAGTCCTTGCAGGTAGAAGCGAAGAGG 2610
R S Y Q H S L H L L N S V S Q I Q G V N D Q S L Q V E A K R 870
CTCAGACAAAAAGCTGATTCTCTCTCAAACCGTGTGACTAAGCATATGGATGAGTTCAAGCACGTGCAAAGCAATCTGGGAACTGGGAA 2700
L Q K A D S L S N R V T K H M D E F K H V Q S N L G N W E 900
GAAGAAACCCGGCAGCTCTTACAGAATGGAAGAATGGGAGACAGACATCAGATCAGTCGCTTTCCCGTGCCAACCTTGCTAAAAGCAGA 2790
E T R Q L L Q N G K N G R Q T S D Q L L S R A N L A K S R 930
GCCCAAGAGCACTAAGTATGGGCAATGCCACTTTTTATGAAGTTGAGAACATCTTAAAGAATCTCAGAGAGTTTGACCTGCAGGTTGGA 2880
A Q E A L S M G N A T F Y E V E N I L K N L R E F D L Q V G 960
GATAAAGAGCAGAAGCTGAAGAGGCCATGAAGAGACTCTCTACATCAGCCAGAAGGTTGCAGGTGCCAGTGACAAGACGAAGCAAGCA 2970
D R A E A E E A M K R L S Y I S Q K V A G A S D K T K Q A 990
GAAGCAGCCCTGGGCAGTGTCTGTCGCCAGCCAGAGGGCAAAGAATGCAGCCAGGGAGGCCCTGGAGATCTCTGGCAAGATAGAACAG 3060
E A A L G S A A A D A Q R A K N A A R E A L E I S G K I E Q 1020
GAGATAGGAGGTCTGAACCTTGAAGCCAATGTGACAGCAGATGGAGCCTTGGCCATGGAGAAGGGACTGGCCACTCTGAAAAGTGAGATG 3150
E I G G L N L E A N V T A D G A L A M E K G L A T L K S E M 1050
AGAGAAGTGAAGGAGAGCTGTCAAGGAAGGAGCAGGAGTTTGACATGGATATGGACGCAGTGCAGATGGTAATTGCAGAGGCCCAAAGA 3240
R E V E G E L S R K E Q E F D M D M D A V Q M V I A E A Q R 1080
GTTGAAAACAGAGCCAAGAATGCTGGAGTTACGATCCAAGACACACTCAACACATTGGATGGCATCCTACACCTAATAGACCAGCCTGGC 3330
V E N R A K N A G V T I Q D T L N T L D G I L H L I D Q P G 1110
AGTGTGGATGAAGAGAGGCTGATCTTACTGGAGCAGAAGCTTTTCCGAGCCAAGACTCAGATCAACAGCCAGCTACGGCCCTTGATGTCA 3420
S V D E E R L I L L E Q K L F R A K T Q I N S Q L R P L M S 1140
GAGCTGGAAGAGAGGGCACATCGGCAGAAGGGCCACCTCCGTTTCTGGAGACTAGCATAGATGGGATTCTGGCTGATGTGAAGAACCTG 3510
E L E E R A H R Q K G H L R F L E T S I D G I L A D V K N L 1170
GAGAACATCAGGGACAACCTGCCCCGGGCTGCTACAATACCCAGGCTCTTGAGCAACAGTgaagctgccttagagatttctcaaccaag 3600
E N I R D N L P P G C Y N T Q A L E Q Q * 1190
gttcttgggattcagacctagctgccttagagatttctcaaccaaggttcttgggattcagacctcagggtcaggagcccgcattgcggg 3690
tggggtgggatgggaatttgaatatgttgaatgcgtgtgctcaggccccagtgaaacctgatccatccctgagacctcggccagataa 3780
atgtctttattg 3789-3'

FIG. 3 cont'd

204270" 29955001

horse	1	MPALMISQJLCFSLPAAATSRREVCDNCKGSKQCI	FDQELHQTGNGFRCLNCNDNDGHCERCKAGFYR	RRDRCLPCNCKSKGSLSARDNSG
man	1	MPALMISQJLCFSLPAAATSRREVCDNCKGSKQCI	FDQELHQTGNGFRCLNCNDNDGHCERCKAGFYR	RRDRCLPCNCKSKGSLSARDNSG
mouse	1	MPALMISQJLCFSLPAAATSRREVCDNCKGSKQCI	FDQELHQTGNGFRCLNCNDNDGHCERCKAGFYR	RRDRCLPCNCKSKGSLSARDNSG
horse	101	RCSCKPGVTGRCDRCLPGFHJLTDAGCAQDORLJDSKCD	PAGISGPDGRCVCKPAVTCRCDRCRPGYVHLDGNGN	PQGCTQCFCYGHSASCHSSG
man	101	RCSCKPGVTGRCDRCLPGFHJLTDAGCAQDORLJDSKCD	PAGISGPDGRCVCKPAVTCRCDRCRPGYVHLDGNGN	PQGCTQCFCYGHSASCHSSG
mouse	101	RCSCKPGVTGRCDRCLPGFHJLTDAGCAQDORLJDSKCD	PAGISGPDGRCVCKPAVTCRCDRCRPGYVHLDGNGN	PQGCTQCFCYGHSASCHSSG
horse	201	DYSVHKIISAEHODVDGKAVQNGSPAKLQWSQHRDI	FSSARRDPVYVAPAKFLGNQVSYGOSLSFDYR	VDRGRHPSAHVILEGAGLRITAPL
man	201	DYSVHKIISAEHODVDGKAVQNGSPAKLQWSQHRDI	FSSARRDPVYVAPAKFLGNQVSYGOSLSFDYR	VDRGRHPSAHVILEGAGLRITAPL
mouse	201	DYSVHKIISAEHODVDGKAVQNGSPAKLQWSQHRDI	FSSARRDPVYVAPAKFLGNQVSYGOSLSFDYR	VDRGRHPSAHVILEGAGLRITAPL
horse	301	MPLSKTLPCCGTTKTYTFRLNEHPSNNWSPOLSYF	FEYRRLRLNLTALEIRATYGEYSTGYIDNVTLIS	ARVPSGAPAPWVEQCVPVYKGFQCDQCSG
man	301	MPLSKTLPCCGTTKTYTFRLNEHPSNNWSPOLSYF	FEYRRLRLNLTALEIRATYGEYSTGYIDNVTLIS	ARVPSGAPAPWVEQCVPVYKGFQCDQCSG
mouse	301	MPLSKTLPCCGTTKTYTFRLNEHPSNNWSPOLSYF	FEYRRLRLNLTALEIRATYGEYSTGYIDNVTLIS	ARVPSGAPAPWVEQCVPVYKGFQCDQCSG
horse	400	YKRD SARLGPFGTCLPCNCGGACDPDTCYSGDENPDI	ECADCPIGFYNDPDRSCKPCPCNGFSCSVMPETE	EEVVCNCCPGVTCARCELCA
man	400	YKRD SARLGPFGTCLPCNCGGACDPDTCYSGDENPDI	ECADCPIGFYNDPDRSCKPCPCNGFSCSVMPETE	EEVVCNCCPGVTCARCELCA
mouse	401	YKRD SARLGPFGTCLPCNCGGACDPDTCYSGDENPDI	ECADCPIGFYNDPDRSCKPCPCNGFSCSVMPETE	EEVVCNCCPGVTCARCELCA
horse	500	GYFGDPFGERGVRPCQCCQNNVDPASGNCNDRLTGR	CLKCIHNTAGVCDQCKAGYGDPLAPNADKCRACN	CNNGFSEVCRSDGSCVCKPGG
man	499	GYFGDPFGERGVRPCQCCQNNVDPASGNCNDRLTGR	CLKCIHNTAGVCDQCKAGYGDPLAPNADKCRACN	CNNGFSEVCRSDGSCVCKPGG
mouse	500	GYFGDPFGERGVRPCQCCQNNVDPASGNCNDRLTGR	CLKCIHNTAGVCDQCKAGYGDPLAPNADKCRACN	CNNGFSEVCRSDGSCVCKPGG
horse	600	QSCHEAALTSPACYNQVQNDQFMQOQI	LEALISKAQGG--AVPNALEGRMQOAEALDIL	REAOISQAVRSFNURAKARTOENSVRDLD
man	599	QSCHEAALTSPACYNQVQNDQFMQOQI	LEALISKAQGG--AVPNALEGRMQOAEALDIL	REAOISQAVRSFNURAKARTOENSVRDLD
mouse	600	QSCHEAALTSPACYNQVQNDQFMQOQI	LEALISKAQGG--AVPNALEGRMQOAEALDIL	REAOISQAVRSFNURAKARTOENSVRDLD
horse	697	DLKMTVERVPALGSQYQNVQDTRRLITQNRLSL	SEASLQNTNTPPSHYVGPNGFKSLAQEA	TRLADSHVQSASNMEOQLAKETOEYSKELMSLVRQA
man	697	DLKMTVERVPALGSQYQNVQDTRRLITQNRLSL	SEASLQNTNTPPSHYVGPNGFKSLAQEA	TRLADSHVQSASNMEOQLAKETOEYSKELMSLVRQA
mouse	700	DLKMTVERVPALGSQYQNVQDTRRLITQNRLSL	SEASLQNTNTPPSHYVGPNGFKSLAQEA	TRLADSHVQSASNMEOQLAKETOEYSKELMSLVRQA
horse	797	QSG--GGSGSLDCAVVQVLYGKLOKTKSLAQEL	SREATQADAEADRSYOHSLHLNSVSO	IGQVNDQSLQVEAKP--EQKADSLSNPVTXHMDEFKHVC
man	797	QSG--GGSGSLDCAVVQVLYGKLOKTKSLAQEL	SREATQADAEADRSYOHSLHLNSVSO	IGQVNDQSLQVEAKP--EQKADSLSNPVTXHMDEFKHVC
mouse	800	QSG--GGSGSLDCAVVQVLYGKLOKTKSLAQEL	SREATQADAEADRSYOHSLHLNSVSO	IGQVNDQSLQVEAKP--EQKADSLSNPVTXHMDEFKHVC
horse	894	SNLGNWEEETRLQIQLONGNGRQTS	DOLLSSPANLAKSRAQEA	LSMGWATFVEVENILKNLREDFLOVCDKRAEAEAEAMKRLSYLSQKVA
man	897	SNLGNWEEETRLQIQLONGNGRQTS	DOLLSSPANLAKSRAQEA	LSMGWATFVEVENILKNLREDFLOVCDKRAEAEAEAMKRLSYLSQKVA
mouse	897	SNLGNWEEETRLQIQLONGNGRQTS	DOLLSSPANLAKSRAQEA	LSMGWATFVEVENILKNLREDFLOVCDKRAEAEAEAMKRLSYLSQKVA
horse	994	LGSAAADAQRAKNAAREALEIS	CKTQEITGCLNEANVTADGALAEK	GLATLKSEMRVEGELSKKEQEDMDAVQMVTL
man	997	LGSAAADAQRAKNAAREALEIS	CKTQEITGCLNEANVTADGALAEK	GLATLKSEMRVEGELSKKEQEDMDAVQMVTL
mouse	997	LGSAAADAQRAKNAAREALEIS	CKTQEITGCLNEANVTADGALAEK	GLATLKSEMRVEGELSKKEQEDMDAVQMVTL
horse	1094	DTLNTLDGILHLIDQPGSVDBER	LILLEQLFRAKTOINSQURPLNSEL	FEERARQKHLREJETSIDGLADYKNLENIRDNLP
man	1097	DTLNTLDGILHLIDQPGSVDBER	LILLEQLFRAKTOINSQURPLNSEL	FEERARQKHLREJETSIDGLADYKNLENIRDNLP
mouse	1096	DTLNTLDGILHLIDQPGSVDBER	LILLEQLFRAKTOINSQURPLNSEL	FEERARQKHLREJETSIDGLADYKNLENIRDNLP

FIG. 4

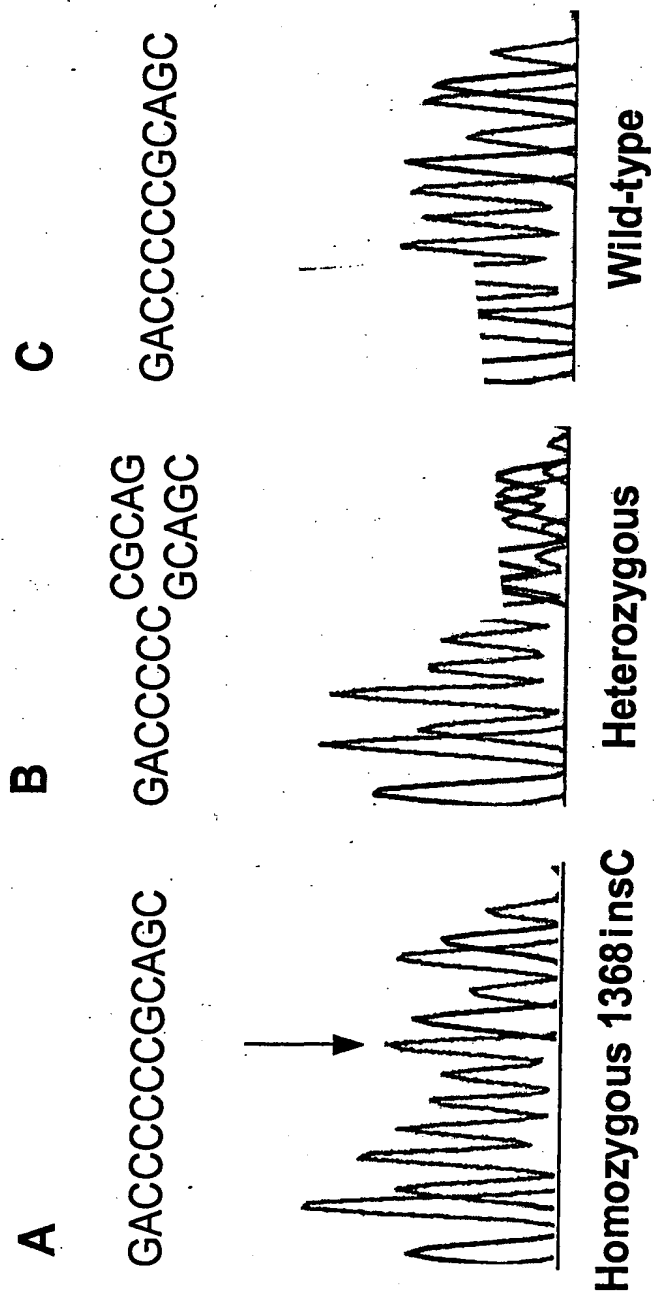


FIG. 5

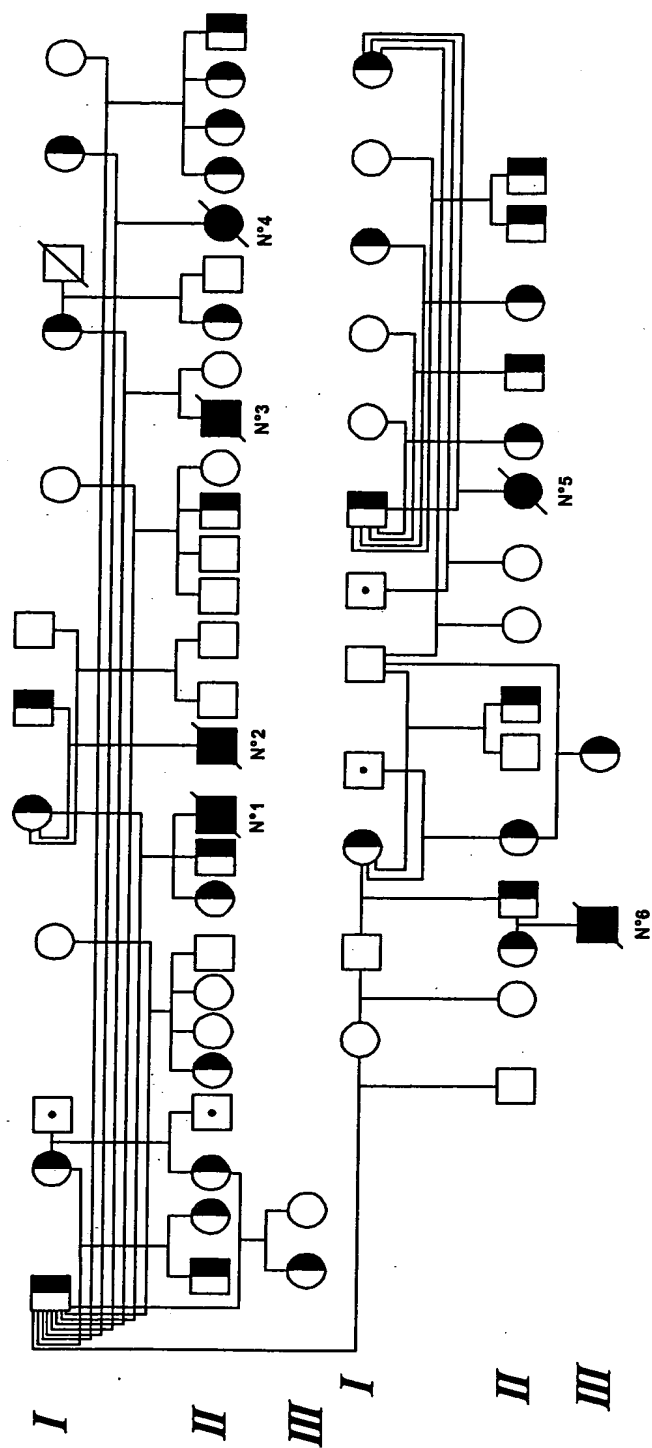


FIG. 6